

### ABSTRACT

In a device for measuring angular positions by using radar pulses and mutually overlapping beam characteristics of at least two antenna elements, a switchable phase shifter is provided in the signal path of at least one antenna element which is switchable in the time-division  
5 multiplexing between different phase states. For the radar received signals, an evaluation device is provided for the joint and especially simultaneous evaluation of signals of two antenna elements with the participation of antenna element, in whose signal path a switchable phase shifter is provided.